

Int net

10/11/2006 10566558.trn

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\* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 FEB 27 New STN AnaVist pricing effective March 1, 2006  
NEWS 4 MAY 10 CA/CAplus enhanced with 1900-1906 U.S. patent records  
NEWS 5 MAY 11 KOREPAT updates resume  
NEWS 6 MAY 19 Derwent World Patents Index to be reloaded and enhanced  
NEWS 7 MAY 30 IPC 8 Rolled-up Core codes added to CA/CAplus and USPATFULL/USPAT2  
NEWS 8 MAY 30 The F-Term thesaurus is now available in CA/CAplus  
NEWS 9 JUN 02 The first reclassification of IPC codes now complete in INPADOC  
NEWS 10 JUN 26 TULSA/TULSA2 reloaded and enhanced with new search and display fields  
NEWS 11 JUN 28 Price changes in full-text patent databases EPFULL and PCTFULL  
NEWS 12 JUL 11 CHEMSAFE reloaded and enhanced  
NEWS 13 JUL 14 FSTA enhanced with Japanese patents  
NEWS 14 JUL 19 Coverage of Research Disclosure reinstated in DWPI  
NEWS 15 AUG 09 INSPEC enhanced with 1898-1968 archive  
NEWS 16 AUG 28 ADISCTI Reloaded and Enhanced  
NEWS 17 AUG 30 CA(SM)/CAplus(SM) Austrian patent law changes  
NEWS 18 SEP 11 CA/CAplus enhanced with more pre-1907 records  
NEWS 19 SEP 21 CA/CAplus fields enhanced with simultaneous left and right truncation  
NEWS 20 SEP 25 CA(SM)/CAplus(SM) display of CA Lexicon enhanced  
NEWS 21 SEP 25 CAS REGISTRY(SM) no longer includes Concord 3D coordinates  
NEWS 22 SEP 25 CAS REGISTRY(SM) updated with amino acid codes for pyrrolysine  
NEWS 23 SEP 28 CEABA-VTB classification code fields reloaded with new classification scheme  
  
NEWS EXPRESS JUNE 30 CURRENT WINDOWS VERSION IS V8.01b, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 26 JUNE 2006.  
  
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NEWS IPC8 For general information regarding STN implementation of IPC 8  
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FILE 'HOME' ENTERED AT 13:47:15 ON 11 OCT 2006

$\Rightarrow$

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Do you want to switch to the Registry File?

Choice (Y/n) :

Switching to the Registry File...

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=> FILE REGISTRY

| COST IN U.S. DOLLARS | SINCE FILE<br>ENTRY | TOTAL<br>SESSION |
|----------------------|---------------------|------------------|
| FULL ESTIMATED COST  | 0.21                | 0.21             |

FILE 'REGISTRY' ENTERED AT 13:47:33 ON 11 OCT 2006

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STRUCTURE FILE UPDATES: 10 OCT 2006 HIGHEST RN 910095-75-9  
DICTIONARY FILE UPDATES: 10 OCT 2006 HIGHEST RN 910095-75-9

New CAS Information Use Policies. enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

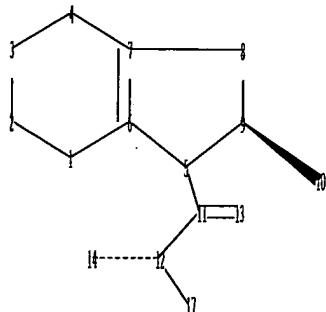
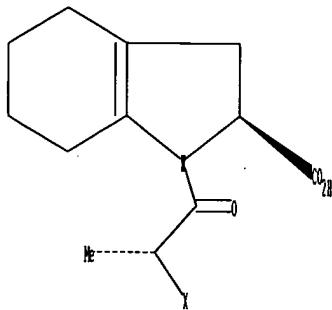
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10566558.str



chain nodes :

10 11 12 13 14 17

ring nodes :

1 2 3 4 5 6 7 8 9

chain bonds :

5-11 9-10 11-12 11-13 12-14 12-17

ring bonds :

1-2 1-6 2-3 3-4 4-7 5-6 5-9 6-7 7-8 8-9

exact/norm bonds :

5-6 5-9 5-11 11-13 12-14

exact bonds :

1-2 1-6 2-3 3-4 4-7 6-7 7-8 8-9 9-10 11-12 12-17

isolated ring systems :

containing 1 :

G1:X

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS  
11:CLASS 12:CLASS 13:CLASS 14:CLASS 17:CLASS

Stereo Bonds:

10-9 (Single Wedge).

Stereo Chiral Centers:

9 (Parity=Don't Care)

Stereo RSS Sets:

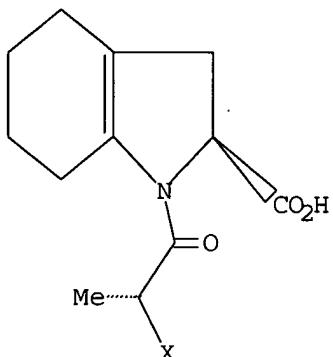
Type=Relative (Default). 1 Nodes= 9

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR



G1 X

Structure attributes must be viewed using STN Express query preparation.

=&gt; s 11

SAMPLE SEARCH INITIATED 13:47:47 FILE 'REGISTRY'  
 SAMPLE SCREEN SEARCH COMPLETED - 5 TO ITERATE

100.0% PROCESSED 5 ITERATIONS 0 ANSWERS  
 SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 5 TO 234

PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=&gt; s 11 sss full

FULL SEARCH INITIATED 13:47:53 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 84 TO ITERATE

100.0% PROCESSED 84 ITERATIONS  
 SEARCH TIME: 00.00.01

1 ANSWERS

L3 1 SEA SSS FUL L1

=&gt; FIL HCAPLUS

COST IN U.S. DOLLARS

SINCE FILE

ENTRY

TOTAL

FULL ESTIMATED COST

166.94

SESSION

167.15

FILE 'HCAPLUS' ENTERED AT 13:47:59 ON 11 OCT 2006  
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10/11/2006 10566558.trn

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FILE COVERS 1907 - 11 Oct 2006 VOL 145 ISS 16  
FILE LAST UPDATED: 10 Oct 2006 (20061010/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13

L4

2 L3

=> d 14 ibib abs hitstr tot

L4 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2005:1311320 HCAPLUS  
DOCUMENT NUMBER: 144:7101  
TITLE: Method for synthesis of perindopril and its pharmaceutically acceptable salts  
INVENTOR(S): Fugier, Claude; Dubuffet, Thierry; Langlois, Pascal  
PATENT ASSIGNEE(S): Adir et Compagnie, Fr.  
SOURCE: Eur. Pat. Appl., 9 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: French  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO.  | DATE       |
|---|------|----------|------------------|------------|
| EP 1367063  | A1   | 20031203 | EP 2003-291931   | 20030731   |
| EP 1367063  | B1   | 20060823 |                  |            |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK   |      |          |                  |            |
| AU 2004261439   | A1   | 20050210 | AU 2004-261439   | 20040729   |
| CA 2533005  | AA   | 20050210 | CA 2004-2533005  | 20040729   |
| WO 2005012333   | A2   | 20050210 | WO 2004-FR2035   | 20040729   |
| WO 2005012333   | A3   | 20050324 |                  |            |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |      |          |                  |            |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  |      |          |                  |            |
| CN 1826352  | A    | 20060830 | CN 2004-80021209 | 20040729   |
| US 2006183920   | A1   | 20060817 | US 2006-566562   | 20060131   |
| NO 2006000922   | A    | 20060224 | NO 2006-922      | 20060224   |
| PRIORITY APPLN. INFO.:  |      |          | EP 2003-291931   | A 20030731 |
|   |      |          | WO 2004-FR2035   | W 20040729 |

OTHER SOURCE(S): MARPAT 144:7101

AB A method for the synthesis of perindopril [(2S,3aS,7aS)-1-[(2S)-2-[(1S)-1-(ethoxycarbonyl)butylamino]propionyl]octahydro-1H-indole-2-carboxylic acid] involves coupling of (2S)-hexahydroindole-2-carboxylic acid or its benzyl ester with (R)-G-CHMeCOCl (G = Cl, Br, OH, tosyloxy, mesyloxy or trifluoromethanesulfonyloxy) and then (S)-Et 2-aminopentanoate, followed by catalytic hydrogenation. In an example, the resp. coupling reactions were carried in CH<sub>2</sub>Cl<sub>2</sub>-EtNPr-i2 at room temperature and MeCN-Et3N at reflux. Yield of perindopril following hydrogenation was 95% (enantiomeric purity 99%).

IT 870152-15-1P

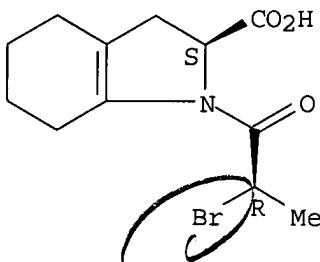
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of perindopril from hexahydroindolecarboxylate and bromopropionyl chloride)

RN 870152-15-1 HCPLUS

CN 1H-Indole-2-carboxylic acid, 1-[(2R)-2-bromo-1-oxopropyl]-2,3,4,5,6,7-hexahydro-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 2 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1311047 HCPLUS

DOCUMENT NUMBER: 144:7100

TITLE: Method for synthesis of perindopril and its pharmaceutically acceptable salts

INVENTOR(S): Fugier, Claude; Dubuffet, Thierry; Langlois, Pascal

PATENT ASSIGNEE(S): Adir et Compagnie, Fr.

SOURCE: Eur. Pat. Appl., 9 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE     |
|--|------|----------|-----------------|----------|
| EP 1367062   | A1   | 20031203 | EP 2003-291930  | 20030731 |
| EP 1367062   | B1   | 20060830 |                 |          |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK      |      |          |                 |          |
| AU 2004261440  | A1   | 20050210 | AU 2004-261440  | 20040729 |
| WO 2005012328  | A2   | 20050210 | WO 2004-FR2036  | 20040729 |
| WO 2005012328  | A3   | 20050324 |                 |          |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, |      |          |                 |          |

GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
 LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,  
 NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,  
 TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
 EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,  
 SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,  
 SN, TD, TG

CN 1826351 A 20060830 CN 2004-80021208 20040729  
 US 2006189813 A1 20060824 US 2006-566558 20060131

PRIORITY APPLN. INFO.: EP 2003-291930 A 20030731  
 WO 2004-FR2036 W 20040729

OTHER SOURCE(S): CASREACT 144:7100; MARPAT 144:7100

AB A method for the synthesis of perindopril [(2S,3aS,7aS)-1-[(2S)-2-[(1S)-1-(ethoxycarbonyl)butylamino]propionyl]octahydro-1H-indole-2-carboxylic acid] involves coupling of (2S)-hexahydroindole-2-carboxylic acid or its benzyl ester with (R)-G-CHMeCOCl (G = Cl, Br, OH, tosyloxy, mesyloxy or trifluoromethanesulfonyloxy) and then (S)-Et 2-aminopentanoate, followed by catalytic hydrogenation. In an example, the resp. coupling reactions were carried in CH<sub>2</sub>Cl<sub>2</sub>-EtNPr-i<sub>2</sub> at room temperature and MeCN-Et<sub>3</sub>N at reflux. Yield of perindopril following hydrogenation was 95% (enantiomeric purity 99%).

IT 870152-15-1P

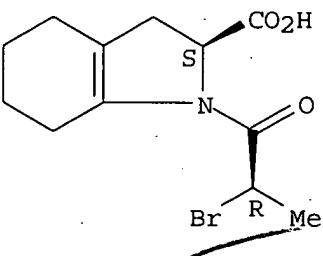
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of perindopril from hexahydroindolecarboxylate and bromopropionyl chloride)

RN 870152-15-1 HCPLUS

CN 1H-Indole-2-carboxylic acid, 1-[(2R)-2-bromo-1-oxopropyl]-2,3,4,5,6,7-hexahydro-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> FIL REGISTRY

COST IN U.S. DOLLARS

| SINCE FILE | TOTAL   |
|------------|---------|
| ENTRY      | SESSION |

FULL ESTIMATED COST

17.81 184.96

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

| SINCE FILE | TOTAL   |
|------------|---------|
| ENTRY      | SESSION |

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STRUCTURE FILE UPDATES: 10 OCT 2006 HIGHEST RN 910095-75-9  
DICTIONARY FILE UPDATES: 10 OCT 2006 HIGHEST RN 910095-75-9

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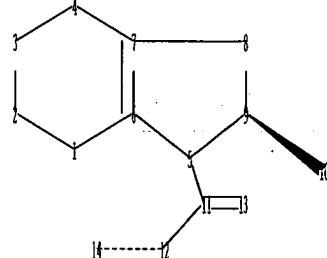
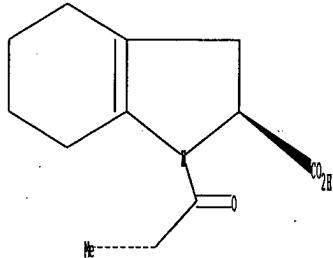
TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when  
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REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=>  
Uploading C:\Program Files\Stnexp\Queries\10566558a.str



chain nodes :  
10 11 12 13 14  
ring nodes :  
1 2 3 4 5 6 7 8 9  
chain bonds :  
5-11 9-10 11-12 11-13 12-14  
ring bonds :  
1-2 1-6 2-3 3-4 4-7 5-6 5-9 6-7 7-8 8-9  
exact/norm bonds :  
5-6 5-9 5-11 11-13 12-14  
exact bonds :  
1-2 1-6 2-3 3-4 4-7 6-7 7-8 8-9 9-10 11-12  
isolated ring systems :  
containing 1 :

G1:X

Match level :  
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS  
11:CLASS 12:CLASS 13:CLASS 14:CLASS

Stereo Bonds:

10/11/2006 10566558.trn

10-9 (Single Wedge).

Stereo Chiral Centers:

9 (Parity=Don't Care)

Stereo RSS Sets:

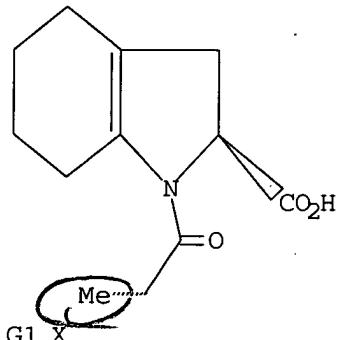
Type=Relative (Default). 1 Nodes= 9

L5 STRUCTURE UPLOADED

=> d 15

L5 HAS NO ANSWERS

L5 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 15

SAMPLE SEARCH INITIATED 13:50:07 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 43 TO ITERATE

100.0% PROCESSED 43 ITERATIONS  
SEARCH TIME: 00.00.01

1 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 467 TO 1253

PROJECTED ANSWERS: 1 TO 80

L6 1 SEA SSS SAM L5

=> s 15 sss full

FULL SEARCH INITIATED 13:50:15 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 808 TO ITERATE

100.0% PROCESSED 808 ITERATIONS  
SEARCH TIME: 00.00.01

4 ANSWERS

L7 4 SEA SSS FUL L5

=> FIL HCAPLUS

10/11/2006 10566558.trn

| COST IN U.S. DOLLARS                       | SINCE FILE ENTRY | TOTAL SESSION |
|--|------------------|---------------|
| FULL ESTIMATED COST                        | 167.38           | 352.34        |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE ENTRY | TOTAL SESSION |
| CA SUBSCRIBER PRICE                        | 0.00             | -1.50         |

FILE 'HCAPLUS' ENTERED AT 13:50:42 ON 11 OCT 2006  
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FILE COVERS 1907 - 11 Oct 2006 VOL 145 ISS 16  
FILE LAST UPDATED: 10 Oct 2006 (20061010/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 17

L8

6 L7

=> d 18 ibib abs hitstr tot

L8 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2005:1311320 HCAPLUS  
DOCUMENT NUMBER: 144:7101  
TITLE: Method for synthesis of perindopril and its pharmaceutically acceptable salts  
INVENTOR(S): Fugier, Claude, Dubuffet, Thierry, Langlois, Pascal  
PATENT ASSIGNEE(S): Adir et Compagnie, Fr.  
SOURCE: Eur. Pat. Appl., 9 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: French  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE     |
|--|------|----------|-----------------|----------|
| EP 1367063   | A1   | 20031203 | EP 2003-291931  | 20030731 |
| EP 1367063   | B1   | 20060823 |                 |          |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,<br>IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK |      |          |                 |          |
| AU 2004261439  | A1   | 20050210 | AU 2004-261439  | 20040729 |
| CA 2533005   | AA   | 20050210 | CA 2004-2533005 | 20040729 |

|  |    |          |                  |            |
|--|----|----------|------------------|------------|
| WO 2005012333  | A2 | 20050210 | WO 2004-FR2035   | 20040729   |
| WO 2005012333  | A3 | 20050324 |                  |            |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,<br>CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,<br>GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,<br>LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,<br>NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,<br>TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW<br>RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,<br>AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,<br>EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,<br>SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,<br>SN, TD, TG |    |          |                  |            |
| CN 1826352   | A  | 20060830 | CN 2004-80021209 | 20040729   |
| US 2006183920  | A1 | 20060817 | US 2006-566562   | 20060131   |
| NO 2006000922  | A  | 20060224 | NO 2006-922      | 20060224   |
| PRIORITY APPLN. INFO.:   |    |          | EP 2003-291931   | A 20030731 |
|  |    |          | WO 2004-FR2035   | W 20040729 |

OTHER SOURCE(S): MARPAT 144:7101

AB A method for the synthesis of perindopril [(2S,3aS,7aS)-1-[(2S)-2-[(1S)-1-(ethoxycarbonyl)butylamino]propionyl]octahydro-1H-indole-2-carboxylic acid] involves coupling of (2S)-hexahydroindole-2-carboxylic acid or its benzyl ester with (R)-G-CHMeCOCl (G = Cl, Br, OH, tosyloxy, mesyloxy or trifluoromethanesulfonyloxy) and then (S)-Et 2-aminopentanoate, followed by catalytic hydrogenation. In an example, the resp. coupling reactions were carried in CH<sub>2</sub>Cl<sub>2</sub>-EtNPr-i<sub>2</sub> at room temperature and MeCN-Et<sub>3</sub>N at reflux. Yield of perindopril following hydrogenation was 95% (enantiomeric purity 99%).

IT 625095-50-3P 870152-15-1P

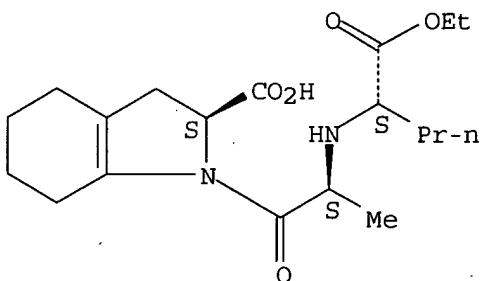
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of perindopril from hexahydroindolecarboxylate and bromopropionyl chloride)

RN 625095-50-3 HCPLUS

CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[(1S)-1-(ethoxycarbonyl)butyl]amino]-1-oxopropyl]-2,3,4,5,6,7-hexahydro-, (2S)-(9CI) (CA INDEX NAME)

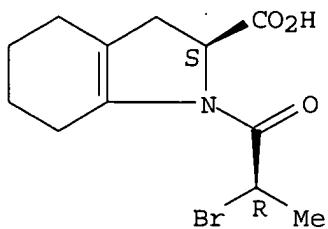
Absolute stereochemistry.



RN 870152-15-1 HCPLUS

CN 1H-Indole-2-carboxylic acid, 1-[(2R)-2-bromo-1-oxopropyl]-2,3,4,5,6,7-hexahydro-, (2S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1311047 HCAPLUS

DOCUMENT NUMBER: 144:7100

TITLE: Method for synthesis of perindopril and its pharmaceutically acceptable salts

INVENTOR(S): Fugier, Claude; Dubuffet, Thierry; Langlois, Pascal

PATENT ASSIGNEE(S): Adir et Compagnie, Fr.

SOURCE: Eur Pat. Appl., 9 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO.  | DATE       |
|---|------|----------|------------------|------------|
| EP 1367062  | A1   | 20031203 | EP 2003-291930   | 20030731   |
| EP 1367062  | B1   | 20060830 |                  |            |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK   |      |          |                  |            |
| AU 2004261440   | A1   | 20050210 | AU 2004-261440   | 20040729   |
| WO 2005012328   | A2   | 20050210 | WO 2004-FR2036   | 20040729   |
| WO 2005012328   | A3   | 20050324 |                  |            |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |      |          |                  |            |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  |      |          |                  |            |
| CN 1826351  | A    | 20060830 | CN 2004-80021208 | 20040729   |
| US 2006189813   | A1   | 20060824 | US 2006-566558   | 20060131   |
| PRIORITY APPLN. INFO.:  |      |          | EP 2003-291930   | A 20030731 |
|   |      |          | WO 2004-FR2036   | W 20040729 |

OTHER SOURCE(S): CASREACT 144:7100; MARPAT 144:7100

AB A method for the synthesis of perindopril [(2S,3aS,7aS)-1-[(2S)-2-[(1S)-1-(ethoxycarbonyl)butylamino]propionyl]octahydro-1H-indole-2-carboxylic acid] involves coupling of (2S)-hexahydroindole-2-carboxylic acid or its benzyl ester with (R)-G-CHMeCOCl (G = Cl, Br, OH, tosyloxy, mesyloxy or trifluoromethanesulfonyloxy) and then (S)-Et 2-aminopentanoate, followed by catalytic hydrogenation. In an example, the resp. coupling reactions

were carried in CH<sub>2</sub>Cl<sub>2</sub>-EtNPr-i<sub>2</sub> at room temperature and MeCN-Et<sub>3</sub>N at reflux. Yield of perindopril following hydrogenation was 95% (enantiomeric purity 99%).

IT 625095-50-3P 870152-15-1P

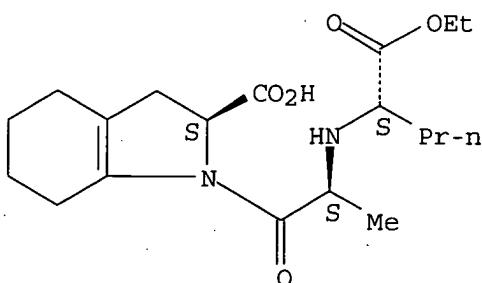
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of perindopril from hexahydroindolecarboxylate and bromopropionyl chloride)

RN 625095-50-3 HCPLUS

CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[(1S)-1-(ethoxycarbonyl)butyl]amino]-1-oxopropyl]-2,3,4,5,6,7-hexahydro-, (2S)-(9CI) (CA INDEX NAME)

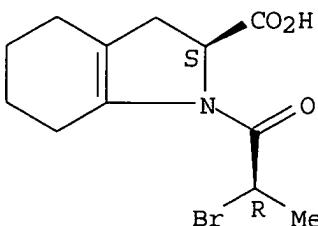
Absolute stereochemistry.



RN 870152-15-1 HCPLUS

CN 1H-Indole-2-carboxylic acid, 1-[(2R)-2-bromo-1-oxopropyl]-2,3,4,5,6,7-hexahydro-, (2S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 6 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:36708 HCPLUS

DOCUMENT NUMBER: 140:59938

TITLE: Method for synthesis of perindopril and its pharmaceutically acceptable salts

INVENTOR(S): Dubuffet, Thierry; Lecouve, Jean-Pierre

PATENT ASSIGNEE(S): Les Laboratoires Servier, Fr.

SOURCE: Eur. Pat. Appl., 9 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

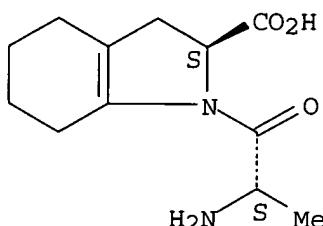
LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.  | KIND   | DATE                                 | APPLICATION NO.  | DATE       |
|---|--|--------------------------------------|------------------|------------|
| EP 1380590  | A1   | 20040114                             | EP 2003-292131   | 20030829   |
| EP 1380590  | B1   | 20060906                             |                  |            |
| R:  | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK   |                                      |                  |            |
| AU 2004270427   | A1   | 20050317                             | AU 2004-270427   | 20040827   |
| WO 2005023841   | A1   | 20050317                             | WO 2004-FR2196   | 20040827   |
| W:  | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW                             |                                      |                  |            |
| RW:   | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG   |                                      |                  |            |
| CN 1839147  | A  | 20060927                             | CN 2004-80024192 | 20040827   |
| PRIORITY APPLN. INFO.:                                |  |                                      | EP 2003-292131   | A 20030829 |
|   |  |                                      | WO 2004-FR2196   | W 20040827 |
| OTHER SOURCE(S):                                      |  | CASREACT 140:59938; MARPAT 140:59938 |                  |            |
| AB  | A method for the synthesis of perindopril and its pharmaceutically-acceptable salts involves coupling of (2S)-2,3,4,5,6,7-hexahydro-1H-indolecarboxylic acid or its benzyl ester with R2-L-Ala-X (R2 is a protective group, X is halo), followed by deprotection, reaction with (R)-PrCH(G)CO2Et (G is Cl, Br, I, or tosyloxy), and catalytic hydrogenation. Addition of tert-butylamine to perindopril provides the salt. |                                      |                  |            |
| IT  | 639067-45-1P   |                                      |                  |            |
| RL:   | RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  |                                      |                  |            |
| (preparation of perindopril and tert-butylamine salt) |  |                                      |                  |            |
| RN  | 639067-45-1 HCPLUS   |                                      |                  |            |
| CN  | 1H-Indole-2-carboxylic acid, 1-[(2S)-2-amino-1-oxopropyl]-2,3,4,5,6,7-hexahydro-, (2S)- (9CI) (CA INDEX NAME)  |                                      |                  |            |

Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 6 HCPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:947713 HCPLUS  
 DOCUMENT NUMBER: 139:381760  
 TITLE: Method for synthesis of perindopril and its pharmaceutically acceptable salts  
 INVENTOR(S): Dubuffet, Thierry; Lecouve, Jean-Pierre

PATENT ASSIGNEE(S) : Les Laboratoires Servier, Fr.

SOURCE: Eur. Pat. Appl., 8 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO.  | DATE       |
|---|------|----------|------------------|------------|
| EP 1367061  | A1   | 20031203 | EP 2003-291601   | 20030630   |
| EP 1367061  | B1   | 20060104 |                  |            |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK   |      |          |                  |            |
| AT 315043   | E    | 20060215 | AT 2003-291601   | 20030630   |
| ES 2256689  | T3   | 20060716 | ES 2003-3291601  | 20030630   |
| AU 2004253721   | A1   | 20050113 | AU 2004-253721   | 20040628   |
| WO 2005003153   | A1   | 20050113 | WO 2004-FR1637   | 20040628   |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |      |          |                  |            |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  |      |          |                  |            |
| CN 1802384  | A    | 20060712 | CN 2004-80016014 | 20040628   |
| US 2006178421   | A1   | 20060810 | US 2005-562490   | 20051222   |
| PRIORITY APPLN. INFO.:  |      |          | EP 2003-291601   | A 20030630 |
|   |      |          | WO 2004-FR1637   | W 20040628 |

OTHER SOURCE(S) : CASREACT 139:381760; MARPAT 139:381760

AB A method for the synthesis of perindopril and its pharmaceutically-acceptable salts (e.g., the tert-butylamine) involves cyclocondensation reaction of N-[(S)-1-carbethoxybutyl]-(S)-alanine with sulfinyl chlorides R1SOCl (R1 = imidazolyl, benimidazolyl, or tetrazolyl) to give Et (2S)-2-[(4S)-4-methyl-2,5-dioxo-1,2,3-oxathiazolidin-3-yl]pentanoate, which is amidated with (2S)-2,3,4,5,6,7-hexahydro-1H-indole-2-carboxylic acid and hydrogenated over 10% Pt/C to give perindopril.

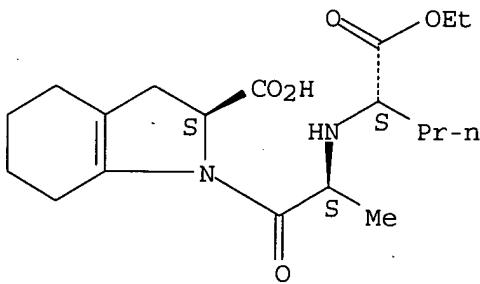
IT 625095-50-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(synthesis of perindopril via cyclocondensation of carbethoxybutylalanine with imidazolesulfinyl chloride)

RN 625095-50-3 HCPLUS

CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[(1S)-1-(ethoxycarbonyl)butyl]amino]-1-oxopropyl]-2,3,4,5,6,7-hexahydro-, (2S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 6 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:909172 HCPLUS

DOCUMENT NUMBER: 139:396166

TITLE: Method for synthesis of perindopril and its pharmaceutically acceptable salts

INVENTOR(S): Dubuffet, Thierry; Lecouve, Jean-Pierre

PATENT ASSIGNEE(S): Les Laboratoires Servier, Fr.

SOURCE: Eur. Pat. Appl., 8 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO.  | DATE       |
|---|------|----------|------------------|------------|
| EP 1362864  | A1   | 20031119 | EP 2003-291600   | 20030630   |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK   |      |          |                  |            |
| AU 2004255899   | A1   | 20050120 | AU 2004-255899   | 20040628   |
| WO 2005005461   | A2   | 20050120 | WO 2004-FR1638   | 20040628   |
| WO 2005005461   | A3   | 20050331 |                  |            |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |      |          |                  |            |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  |      |          |                  |            |
| CN 1805972  | A    | 20060719 | CN 2004-80016324 | 20040628   |
| US 2006148884   | A1   | 20060706 | US 2005-562950   | 20051223   |
| PRIORITY APPLN. INFO.:  |      |          | EP 2003-291600   | A 20030630 |
|   |      |          | WO 2004-FR1638   | W 20040628 |

OTHER SOURCE(S): CASREACT 139:396166; MARPAT 139:396166

AB Perindopril and its pharmaceutically acceptable salts (e.g., tert-butylamine salt) are prepared by the cyclocondensation reaction of N-[(S)-carboethoxy-1-butyl]-(S)-alanine with a carbonyl compound X1COX2 (X1, X2 = leaving group; e.g., 1,1'-carbonyldimidazole) to give Et (2S)-2-[(4S)-4-Methyl-2,5-dioxo-1,3-oxazolidin-3-yl]pentanoate which is

amidated with (2S)-2,3,4,5,6,7-hexahydro-1H-indole-2-carboxylic acid in the presence of an acid (e.g., hydrochloric acid) to give (2S)-1-[(2S)-2-[(1S)-1-(ethoxycarbonyl)butylamino]propionyl]-2,3,4,5,6,7-hexahydro-1H-indole-2-carboxylic acid which is hydrogenated with a 10% Pt/C catalyst to give perindopril which is then salified with tert-butylamine to give perindopril tert-butylammonium salt.

IT 625095-50-3P

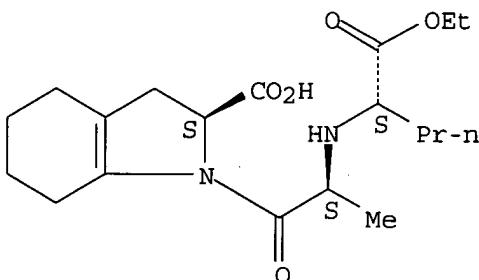
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; in a method for synthesis of perindopril and its pharmaceutically acceptable salts)

RN 625095-50-3 HCPLUS

CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[(1S)-1-(ethoxycarbonyl)butyl]amino]-1-oxopropyl]-2,3,4,5,6,7-hexahydro-, (2S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 6 OF 6 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:470308 HCPLUS

DOCUMENT NUMBER: 139:22502

TITLE: Method for the synthesis of (2S,3aS,7aS)-1-[(S)-alanyl]octahydro-1H-indole-2-carboxylic acid derivatives for use in the synthesis of perindopril

INVENTOR(S): Dubuffet, Thierry; Lecouve, Jean-Pierre

PATENT ASSIGNEE(S): Les Laboratoires Servier, Fr.

SOURCE: Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

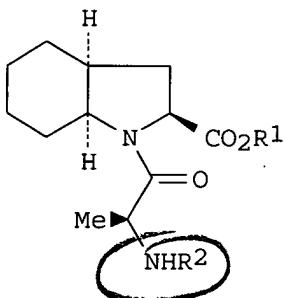
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|---|------|----------|-----------------|----------|
| EP 1319668  | A1   | 20030618 | EP 2003-290606  | 20030312 |
| EP 1319668  | B1   | 20041027 |                 |          |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK |      |          |                 |          |
| AT 280775   | E    | 20041115 | AT 2003-290606  | 20030312 |
| PT 1319668  | T    | 20050228 | PT 2003-290606  | 20030312 |
| ES 2231759  | T3   | 20050516 | ES 2003-3290606 | 20030312 |
| WO 2004082357   | A2   | 20040930 | WO 2004-FR593   | 20040312 |
| WO 2004082357   | A3   | 20041028 |                 |          |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,  
 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,  
 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
 LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,  
 NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,  
 TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,  
 BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
 ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,  
 SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,  
 TD, TG

PRIORITY APPLN. INFO.: EP 2003-290606 A 20030312  
 OTHER SOURCE(S): CASREACT 139:22502; MARPAT 139:22502  
 GI



AB Alanyloctahydroindolecarboxylic acid derivs. I (R1 is H, alkyl, or benzyl; R2 is a protecting group) were prepared from 2,7-oxepanedione by a multistep procedure, i.e., reaction with (R)-XCH<sub>2</sub>CH(NHR<sub>3</sub>)CO<sub>2</sub>R<sub>4</sub> (X is Br or iodo; R<sub>3</sub> is a protecting group; R<sub>4</sub> is benzyl or alkyl), cyclization of deprotected 2-amino-4-oxanonanedioic acid derivative, Ti-catalyzed coupling to form the indole ring system, reaction with an alanine derivs., and catalytic hydrogenation. In an example, I (R1 = H, R2 = tert-butoxycarbonyl) was obtained with enantiomeric purity 99%.

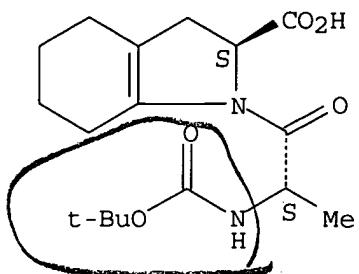
IT 537014-87-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis of alanyloctahydroindolecarboxylic acid derivs. for use in synthesis of perindopril)

RN 537014-87-2 HCPLUS

CN 1H-Indole-2-carboxylic acid, 1-[(2S)-2-[[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopropyl]-2,3,4,5,6,7-hexahydro-, (2S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> log y

COST IN U.S. DOLLARS

| SINCE FILE<br>ENTRY | TOTAL<br>SESSION |
|---------------------|------------------|
|---------------------|------------------|

FULL ESTIMATED COST

33.19 385.53

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

| SINCE FILE<br>ENTRY | TOTAL<br>SESSION |
|---------------------|------------------|
|---------------------|------------------|

CA SUBSCRIBER PRICE

-4.50 -6.00

STN INTERNATIONAL LOGOFF AT 13:51:19 ON 11 OCT 2006